

The invention claimed is:

1 1. A method of creating a personal Web view comprising:
2 creating a plurality of Web clippings, the personal view comprising a
3 plurality of Web clippings, each Web clipping containing information from an
4 associated one of a corresponding plurality of Web pages, each Web page being
5 selected by a user from essentially any accessible Web page on any Web
6 server, each of the plurality of Web clippings being created by:

7 generating an access script to automatically retrieve the Web page
8 associated with the Web clipping;

9 generating an extraction expression to extract one or more user-
10 selected information elements from the Web page associated with the
11 Web clipping; and

12 incorporating the access script and the extraction expression into a
13 specification of the associated Web clipping;

14 incorporating the specification of each Web clipping into a specification of
15 the Web view; and

16 storing the specification of the Web view, wherein when the stored
17 specification of the Web view is replayed and active, the plurality of Web pages
18 are automatically retrieved and the selected one or more information elements
19 from each Web page are extracted and incorporated into each associated Web
20 clipping and the plurality of Web clippings are combined for display in a browser.

1 2. The method of claim 1 wherein at least one of the Web pages is
2 directly retrievable through a specified URL which is incorporated into the access
3 script to retrieve that Web page.

1 3. The method of claim 1 wherein at least one of Web pages is
2 retrievable through a specified site description which is incorporated into the
3 access script to retrieve that Web page.

1 4. The method of claim 1 wherein at least one of the Web pages is
2 retrievable through a specified a smart bookmark which is incorporated into the
3 access script to retrieve that Web page.

1 5. The method of claim 1 wherein a layout of the Web clippings within the
2 personal Web view is incorporated in the specification of the Web view.

1 6. The method of claim 1 wherein the extraction expression generated for
2 one or more of the Web clippings comprises a DOM address of one or more
3 information elements extracted from the retrieved one Web page associated with
4 the one Web clipping.

1 7. The method of claim 1 wherein the extraction expression generated for
2 one or more of the Web clippings comprises an XPATH expression of one or
3 more information elements extracted from the retrieved one Web page
4 associated with the one Web clipping.

1 8. The method of claim 1 wherein the extraction expression generated for
2 one or more of the Web clippings includes redundancy to insure that when the
3 Web view is replayed the one or more information elements extracted from the
4 retrieved one Web page associated with the one Web clipping are the actual
5 user-selected information elements.

1 9. The method of claim 8 wherein the redundancy comprises at least one
2 string associated with one or more information elements extracted from the
3 retrieved one Web page associated with the one Web clipping.

1 10. A method of displaying a personal Web view comprising:
2 accessing a specification of the personal Web view, the Web view
3 comprising a plurality of Web clippings, each Web clipping containing information
4 from an associated one of a corresponding plurality of Web pages that have
5 been individually selected by a user from essentially any accessible Web page

6 on any Web server, the specification of the personal Web view containing a
7 specification for each of the plurality of Web clippings;
8 automatically retrieving the Web page associated with each Web clipping
9 in accordance with an access script for retrieving that Web page that is
10 associated with the specification of the Web clipping;
11 extracting one or more user-selected information elements from each
12 Web page in accordance with an extraction expression in the specification of
13 each associated Web clipping to create a displayable Web clipping containing
14 those elements, the extraction expression associated with each Web clipping
15 indicating the one or more user-selected information elements from the
16 associated Web page to be included in the Web clipping; and
17 combining and displaying in a browser the plurality of Web clippings
18 containing the extracted information elements from the plurality of associated
19 retrieved Web pages.

1 11. The method of claim 10 wherein the access script for at least one of
2 the Web pages directly retrieves the Web page through a specified URL.

1 12. The method of claim 10 wherein the access script for at least one of
2 the Web pages retrieves the Web page through a specified site description.

1 13. The method of claim 10 wherein the access script for at least one of
2 the Web pages retrieves the Web page through a specified smart bookmark.

1 14. The method of claim 10 wherein the Web clippings are displayed in
2 the Web view in the browser in accordance with a layout specified in the
3 specification of the Web view.

1 15. The method of claim 10 wherein the extraction expression in one or
2 more of the Web clippings comprises a DOM address of one or more user-
3 selected information elements to be extracted from the one Web page
4 associated with the one Web clipping.

1 17. The method of claim 16 wherein the extraction expression in one or
2 more of the Web clippings includes redundancy to insure that when displaying
3 the Web view the one or more information elements extracted from the one Web
4 page associated with the one Web clipping are the actual user-selected
5 information elements.

1 19. Apparatus for creating a personal Web view comprising:
2 means for creating each of a plurality of Web clippings, the personal Web
3 view comprising a plurality of Web clippings, each Web clipping containing
4 information from an associated one of a plurality of Web pages, each Web page
5 being selected by a user from essentially any accessible Web page on any Web
6 server, said means for creating comprising:

means for incorporating the individual access script and extraction
expression for each Web clipping into a specification of the Web clipping;

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16 means for storing the specification of the Web view, wherein when the
17 stored specification of the Web view is replayed and active, the plurality of Web
18 pages are automatically retrieved and the user-selected one or more information
19 elements from each Web page are extracted and incorporated into each
20 associated Web clipping and the plurality of Web clippings are combined for
21 display in a browser.

1 20. The apparatus of claim 19 wherein at least one of the Web pages is
2 directly retrievable through a specified URL which is incorporated into the access
3 script to retrieve that Web page.

1 21. The apparatus of claim 19 wherein at least one of the Web pages is
2 directly retrievable through a specified site description which is incorporated into
3 the access script to retrieve that page.

1 22. The apparatus of claim 19 wherein at least one of the Web pages is
2 directly retrievable through a specified smart bookmark which is incorporated into
3 the script to retrieve that page.

1 23. The apparatus of claim 19 wherein a layout of the plurality of Web
2 clippings within the personal Web view is incorporated in the specification of the
3 Web view.

1 24. The apparatus of claim 19 wherein the extraction expression in one or
2 more of the Web clippings comprises a DOM address of one or more user-
3 selected information elements extracted from the one Web page associated with
4 the one Web clipping.

1 25. The apparatus of claim 19 wherein the extraction expression in one or
2 more of the Web clippings comprises an XPATH expression of one or more user-
3 selected information elements extracted from the one Web page associated with
4 the one Web clipping.

1 26. The apparatus of claim 19 wherein the extraction expression
2 generated for one or more of the Web clippings includes redundancy to insure
3 that when the Web view is replayed the one or more information elements
4 extracted from the retrieved one Web page associated with the one Web clipping
5 are the actual user-selected information elements.

1 27. The apparatus of claim 26 wherein the redundancy comprises at least
2 one string associated with one or more information elements extracted from the
3 retrieved one Web page associated with the one Web clipping.

1 28. Apparatus for displaying a personal Web view comprising a plurality of
2 Web clippings, each Web clipping containing information from an associated one
3 of a plurality of Web pages, the apparatus comprising:

4 means for accessing a specification of the personal Web view, the Web
5 view comprising a plurality of Web clippings, each Web clipping containing
6 information from an associated one of a corresponding plurality of Web pages
7 that have been individually selected by a user from essentially any accessible
8 Web page on any Web server, the specification of the personal view containing a
9 specification for each of the plurality of Web clippings;

10 means for automatically retrieving the Web page associated with each
11 Web clipping in accordance with an access script for retrieving that Web page
12 that is associated with the specification of the Web clipping;

13 means for extracting one or more user-selected information elements in
14 each Web page in accordance with an extraction expression in the specification
15 of each associated Web clipping to create a displayable Web clipping containing
16 those elements; and

17 means for combining and displaying in a browser the plurality of Web
18 clippings containing the extracted information elements from the plurality of
19 associated retrieved Web pages.

1 29. The apparatus of claim 28 wherein the access script for at least one
2 of the Web pages directly retrieves the Web page through a specified URL.

1 30. The apparatus of claim 28 wherein the access script for at least one
2 of the Web pages retrieves the Web page through a specified site description.

1 31. The apparatus of claim 28 wherein the access script for at least one
2 of the Web pages retrieves the Web page through a specified smart bookmark.

1 32. The apparatus of claim 28 wherein the plurality of Web clippings are
2 displayed in the Web view in the browser in accordance with a layout specified in
3 the specification of the Web view.

1 33. The apparatus of claim 28 wherein the extraction expression in one or
2 more of the Web clippings comprises a DOM address of one or more user-
3 selected information elements extracted from the one Web page associated with
4 the one Web clipping.

1 34. The apparatus of claim 28 wherein the extraction expression in one or
2 more of the Web clippings comprises an XPATH expression of one or more user-
3 selected information elements extracted from the one Web page associated with
4 the one Web clipping.

1 35. The apparatus of claim 28 wherein the extraction expression in one or
2 more of the Web clippings includes redundancy to insure that when the Web
3 view is displayed the one or more information elements extracted from the
4 retrieved one Web page associated with the one Web clipping are the actual
5 user-selected information elements.

1 36. The apparatus of claim 35 wherein the redundancy comprises at least
2 one string associated with one or more information elements to be extracted
3 from the retrieved one Web page associated with the one Web clipping.

1 37. A memory for storing a specification of a personal Web view for
2 execution on a browser comprising:

3 a data structure stored in the memory, said data structure including
4 information for automatically retrieving a plurality of predefined Web pages that
5 have been selected by a user from essentially any accessible Web page on any
6 Web server, information for extracting user-selected information content from the
7 plurality of Web pages, and information for displaying the extracted information
8 content from the plurality of Web pages together as the Web view in the browser.

1 38. The memory of claim 37 wherein the information for retrieving at least
2 one of the Web pages comprises a specified URL.

1 39. The memory of claim 37 wherein the information for retrieving at least
2 one of the Web pages comprises a specified site description.

1 40. The memory of claim 37 wherein the information for retrieving at least
2 one of the Web pages comprises a specified smart bookmark.

1 41. The memory of claim 37 wherein the data structure further comprises
2 information for displaying the information content from the plurality of Web pages
3 in a the browser in accordance with a specified layout.

1 42. The memory of claim 37 wherein the information for extracting user-
2 selected information content comprises one or more DOM addresses of the user-
3 selected information content from one or more of the plurality of pages.

1 43. The memory of claim 37 wherein the information for extracting user-
2 selected information content comprises one or more XPATH expressions of the
3 user-selected information content from one or more of the plurality of pages.

1 44. The memory of claim 37 wherein the information for extracting user-
2 selected information content includes redundancy information for insuring that
3 when the Web view is replayed the extracted information content is the actual
4 information content selected by the user.

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1 45. The memory of claim 44 wherein the redundancy information
2 comprises at least one string associated with at least some of the user-selected
3 information content from at least some of the plurality of Web pages.

1 46. A computer readable media tangibly embodying a program of
2 instructions executable by a computer to perform a method for creating a
3 personal Web view, the method comprising:

4 creating a plurality of Web clippings, the personal view comprising a
5 plurality of Web clippings, each Web clipping containing information from an
6 associated one of a corresponding plurality of Web pages, each Web page being
7 selected by a user from essentially any accessible Web page on any Web
8 server, each of the plurality of Web clippings being created by:

9 generating an access script to automatically retrieve the Web page
10 associated with the Web clipping;

11 generating an extraction expression to extract one or more user-
12 selected information elements from the Web page associated with the
13 Web clipping; and

14 incorporating the access script and the extraction expression into a
15 specification of the associated Web clipping;

16 incorporating the specification of each Web clipping into a specification of
17 the Web view; and

18 storing the specification of the Web view, wherein when the stored
19 specification of the Web view is replayed and active, the plurality of Web pages
20 are automatically retrieved and the selected one or more information elements
21 from each Web page are extracted and incorporated into each associated Web
22 clipping and the plurality of Web clippings are combined for display in a browser.

1 47. The media of claim 46 wherein in the method at least one of the Web
2 pages is directly retrievable through a specified URL which is incorporated into
3 the access script to retrieve that Web page.

1 48. The media of claim 46 wherein in the method at least one of specified
2 Web pages is retrievable through a specified site description which is
3 incorporated into the access script to retrieve that Web page.

1 49. The media of claim 46 wherein in the method at least one of the Web
2 pages is retrievable through a specified a smart bookmark which is incorporated
3 into the access script to access that Web page.

1 50. The media of claim 46 wherein in the method a layout of the plurality
2 of Web clippings within the personal Web view is incorporated in the
3 specification of the Web view.

1 51. The media of claim 46 wherein in the method the extraction
2 expression generated for one or more of the Web clippings comprises a DOM
3 address of one or more information elements extracted from the retrieved one
4 Web page associated with the one Web clipping.

1 52. The media of claim 46 wherein in the method the extraction
2 expression generated for one or more of the Web clippings comprises an XPATH
3 expression of one or more information elements extracted from the retrieved one
4 Web page associated with the one Web clipping.

1 53. The media of claim 46 wherein in the method the extraction
2 expression generated for one or more of the Web clippings includes redundancy
3 to insure that when the Web view is replayed the one or more information
4 elements extracted from the retrieved one Web page associated with the one
5 Web clipping are the actual user-selected information elements.

1 54. The media of claim 53 wherein in the method the redundancy
2 comprises at least one string associated with one or more information elements

3 extracted from the retrieved one Web page associated with the one Web
4 clipping.

1 55. A computer readable media tangibly embodying a program of
2 instructions executable by a computer to perform a method for displaying a
3 personal Web view, the method comprising:

4 accessing a specification of the personal Web view, the Web view
5 comprising a plurality of Web clippings, each Web clipping containing information
6 from an associated one of a corresponding plurality of Web pages that have
7 been individually selected by a user from essentially any accessible Web page
8 on any Web server, the specification of the personal Web view containing a
9 specification for each of the plurality of Web clippings;

10 automatically retrieving the Web page associated with each Web clipping
11 in accordance with an access script for retrieving that Web page that is
12 associated with the specification of the Web clipping;

13 extracting one or more user-selected information elements from each
14 Web page in accordance with an extraction expression in the specification of
15 each associated Web clipping to create a displayable Web clipping containing
16 those elements, the extraction expression associated with each Web clipping
17 indicating the one or more user-selected information elements on the associated
18 Web page to be included in the Web clipping; and

19 combining and displaying in a browser the plurality of Web
20 clippings containing the extracted information elements from the plurality of
21 associated retrieved Web pages.

1 56. The media of claim 55 wherein in the method the access script for at
2 least one of the Web pages directly retrieves the Web page through a specified
3 URL.

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- 3

- 1
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- 3

- 1
- 2
- 3

$$\begin{matrix} 1 \\ 2 \\ 3 \\ 4 \end{matrix}$$

- 1
- 2
- 3
- 4

- 1
- 2
- 3
- 4
- 5

- 1
- 2
- 3
- 4

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2 automatically retrieving a plurality of predetermined Web pages that have
3 been pre-selected by a user from essentially any accessible Web page on any
4 Web server;

5 automatically extracting user-pre-selected information content from the
6 plurality of Web pages, and

7 displaying the user-pre-selected information content from the plurality of
8 Web pages together as a personal Web view in a browser.

Sub AB 1 65. The method of claim 64 wherein at least one of the Web pages is
2 directly retrieved through a specified URL.

1 66. The method of claim 64 wherein at least one of the Web pages is
2 retrieved through a specified site description.

1 67. The method of claim 64 wherein at least one of the Web pages is
2 retrieved through a specified smart bookmark.

1 68. The method of claim 64 wherein the information content from the
2 plurality of Web pages is displayed in a browser in accordance with a specified
3 layout.

1 69. The method of claim 64 wherein the extracted user-pre-selected
2 information content is extracted using DOM addresses of the information content
3 on its associated Web pages.

1 70. The method of claim 64 wherein the extracted user-pre-selected
2 information content is extracted using XPATH expressions of the information
3 content on its associated Web pages.

1 71. The method of claim 64 further comprising, after extracting content
2 from a Web page, comparing a predetermined portion of that extracted
3 information with an expected information content for that portion for insuring that
4 the extracted information content is the actual pre-selected information content.

1 72. The method of claim 71 wherein the expected information content for
2 a predetermined portion comprises at least one string associated with the actual
3 pre-selected information content.

1 73. A method of creating a personal Web view comprising:
2 for each of a plurality of Web pages, generating an access script to
3 automatically retrieve the Web page, each of said Web pages being selected by
4 a user from essentially any Web page on any Web server;

5 incorporating the access script for each of said Web pages and an
6 expression for extracting user-selected information content from each of said
7 Web pages into a specification of the personal Web view, the personal Web view
8 containing information from each of said plurality of Web pages ; and

9 storing the specification of the Web view, wherein when the stored Web
10 view specification is replayed and active, said plurality of Web pages are
11 automatically retrieved and the user-selected information content from each of
12 said Web pages is extracted and combined for display in a browser.

1 74. The method of claim 73 wherein at least one of said Web pages is
2 directly retrievable through a specified URL which is incorporated into the access
3 script to retrieve that Web page.

1 75. The method of claim 73 wherein at least one of said Web pages is
2 retrievable through a specified site description which is incorporated into the
3 access to retrieve that Web page.

1 76. The method of claim 73 wherein at least one of the Web pages is
2 retrievable through a specified smart bookmark which is incorporated into the
3 access script to retrieve that Web page.

1 77. The method of claim 73 wherein a layout of the information content
2 from said plurality of Web pages is incorporated into the specification of the Web
3 view.

1 81. The method of claim 80 wherein the redundancy comprises at least
2 one string associated with the information content extracted from said one Web
3 page.

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